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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/942,665 | 08/31/2001 | Shinji Tai | 213446US0 | 7812 |

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| EXAMINER | |
|---|---|
| WYROZEBSKI LEE, KATARZYNA I | |
| **ART UNIT** | **PAPER NUMBER** |
| 1714 | |

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|---|---|---|
| | 09/942,665 | TAI ET AL. |
| | Examiner | Art Unit |
| | Katarzyna Wyrozebski | 1714 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *25 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

In view of applicant's amendment mailed on 2/25/2004, the prior art rejections of record are not overcome and following final office action is necessitated.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 7, 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The amendment made to the claims 7 and 21 introduces new matter since the specification does not contain support for the newly added limitation. Since the specification does not support the new limitation, the rejection can be overcome by providing a declaration from the applicant that would indicate that the molecular weight is a number average molecular weight and the method by which the molecular weight was determined.

***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 2, 3, 14, 15-17, 27-30, 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Hata (US 5,972,447).

The discussion of the disclosure of the prior art of HATA from paragraph 4 of the office action mailed on 7/14/2002 is incorporated her by reference.

5. Claims 1, 15, 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroshi (EP 814,126).

The discussion of the disclosure of the prior art of HIROSHI from paragraph 5 of the office action mailed on 7/14/2002 is incorporated her by reference.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-16, 19-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroshi (EP 814,126) in view of evidence given in Bertin (US 6,294,609).

The discussion of the disclosure of the prior art of HATA from paragraph 9 of the office action mailed on 7/14/2002 is incorporated her by reference.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroshi (EP 814,126) as applied to claims 1-16, 19-37 above, and further in view of Speer (EP 854,166).

The discussion of the disclosure of the prior art of HIROSHI and SPEER from paragraph 10 of the office action mailed on 7/14/2002 is incorporated her by reference.

In the response filed on 2/25/2004 the applicant's argued following:

a) The prior art of HATA does not teach the property of the composition, which is the oxygen absorption rate of 0.01 $ml/m^2$ per day or more.

With respect to the above argument, the examiner would like to point out that the properties of the composition depend on specific components of the composition. The components are what gives the composition its properties. Therefore the properties of the composition of HATA will be inherently the same as those of the present invention.

b) The copolymer of HIROSHI (EP 126) although contains aromatic vinyl monomer, it does not include C=C. The applicants then go on stating that aromatic ring does not contain C=C double bonds.

The examiner was completely buffled with the applicant's statement. Maybe applicant's tried to convey something else, but the way the comment came out sounded that aromatic rings do not have double bonds, which statement underminds entire fundamentals of organic chemistry as we know it.

c) The applicant's argued that the prior art of HIROSHI contains polymers such as isoprene or butadiene, it would negatively impart the gas barrier property of the prior art of HIROSHI.

As applicants correctly pointed out, the prior art of HIROSHI stated that addition polymers can be used, which signifies that they are optional additives and not required. In addition the applicants correctly pointed out that these polymers can be added in amount that would not impair the effects of the composition. The applicants then proceeded to state that addition of such polymers would impair the composition of HIROSHI.

Outside of making two very much contradicting statements, if the prior art of HIROSHI contemplates use of such polymers in appropriate amount so that the properties of composition are not affected then such possibility must be possible.

d) The applicants argued that the prior art of HIROSHI does not teach oxygen absorption property of 0.01 $ml/m^2$ per day or more.

As stated in response a), the oxygent absorption is an inherent property of the composition, and would therefore be inherent to the prior art of HIROSHI.

e) The prior art of BERTIN fails to remedy deficiencies of HIROSHI.

In view of the responses to the arguments b-d, the prior art of HIROSHI teaches the limitations of the base independent claims.

f) There is no motivation to combine the prior art of HIROSHI, which comprises flexible resin and thereby has poor oxygen absorption with the prior art of Speer.

With respect to the above argument, the applicants completely misread the teaching of HIROSHI, which specifically states that the isoprene and butadiene polymers can be utilized in such amounts so that the barrier property of the composition will not be impaired. Therefore the composition of HIROSHI does have good barrier properties and its combination with the prior art of SPEER satisfies *prima facie* obviousness.

g) There is no reasonable expectation that the combination of transition metal catalyst to the composition of HIROSHI would result in desires oxygen absorption.

With respect to the above argument, the prior art of HIROSHI discloses composition that has good absorption property. At the same time the prior art of Speer teaches use of metal catalyst that has oxygen scavenging properties. By default this catalyst will increase oxygen barrier property of the composition by binding to the oxygen. With respect to the combination of the two disclosures each of which pursues a composition having good oxygen barrier property, The combination of two compositions, each of which is taught by the prior art to be useful for the same purpose, in order to for a third composition that is to be used for the very same purpose may be prima facie obvious. *In re Susi*, 440 F.2d 442, 445, 169 USPQ 423, 426 (CCPA 1971).

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katarzyna Wyrozebski
Primary Examiner
Art Unit 1714

May 4, 2004